Emory Transplant Center
MAKING A DIFFERENCE IN THE LIVES OF OUR PATIENTS AND OUR COMMUNITY

Information for
POTENTIAL LIVING DONORS FOR KIDNEY TRANSPLANT
**Phase One**

**THE TELEPHONE INTERVIEW**

The first stage of the living donor process is for the potential donor to call the transplant coordinator. The transplant coordinator will need approximately thirty minutes of your time to complete a telephone interview and discuss the process for donation. This interview includes a medical screening in order to determine if you would be an appropriate candidate to continue to phase 2.

**Phase Two**

**BLOOD TESTING**

The second phase involves blood testing. The following three tests are completed: blood type, cross-match, and human leukocyte antigens (HLA) match or genetic compatibility.

The first test, identifying your blood group, determines if your blood type is compatible with the recipient.

**BLOOD GROUP:**

Compatible blood groups for living donor transplantation:

<table>
<thead>
<tr>
<th>RECIPIENT</th>
<th>DONOR</th>
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<tbody>
<tr>
<td>A</td>
<td>A or O</td>
</tr>
<tr>
<td>B</td>
<td>B or O</td>
</tr>
<tr>
<td>AB</td>
<td>A, B, AB, or O</td>
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<tr>
<td>O</td>
<td>O</td>
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The second test is the cross-match, which determines if the recipient has any antibodies or sensitivities to the donor. If the cross-match test result is positive, this signifies the recipient has the ability to attack the donor’s cells and the transplanted kidney. Therefore he/she could not donate. However, a negative cross-match result signifies the recipient does not have antibodies against the donor’s kidney and he/she could be a potential donor.

Depending on the donor/recipient situation, the third blood test, HLA typing, will be done at this time. This test determines if the donor and recipient share any of the same genetic markers. This is sometimes referred to as “the match.” Six of your genetic markers are identified and compared with the recipient’s. It is not necessary for the donor and recipient to share any of the same genetic markers, however it may be helpful to the recipient if some of them are the same.

Once these blood tests are drawn it takes approximately 2-3 weeks for the results to be completed. You will be called by your coordinator and given the results. At that time the coordinator will answer questions and provide scheduling instructions if you wish to proceed to the third phase of inpatient evaluation for donation.

**Multiple Donors**

Many times multiple donors have blood testing performed for one recipient. We cannot release information regarding who or how many donors were tested to the recipient or potential donors. In this situation, we give each donor his/her results and we ask all to talk to each other if they want to proceed. The potential donors should then choose one person for phase three, the inpatient medical evaluation. We can provide information that may help in making this decision. There is more involved in choosing a potential donor than simply considering the genetic match. For example, can the person take time from work and family necessary for surgery and recovery? Most importantly, the act of donation must be voluntary. After taking all factors into consideration, only one donor at a time will be medically evaluated in phase three. We ask the selected person for phase three to call his/her coordinator to arrange the hospital admission evaluation.
Depending on your medical history, additional tests such as an oral glucose tolerance test or a 24-hour blood pressure monitor may be necessary prior to entering the evaluation phase. There are two ways to complete the donor evaluation phase:

1. For most patients the evaluation requires a two day admission to the Emory University Hospital. During this admission, we provide donation education and perform a thorough medical and psychological evaluation to determine donor suitability. The potential donor will have the opportunity to meet the members of the transplant team, which include the transplant surgeon, nurse coordinator, physician assistant, nurse practitioner, nephrologist, psychiatrist, and social worker. To determine the health status of the potential donor, the following medical tests are performed: medical history and physical examination, chest x-ray, electrocardiogram (EKG), and blood and urine tests. A CT angiogram is also done. This procedure is a specialized x-ray, which enables the transplant team to determine whether there are any abnormalities in the kidneys or their blood vessels. If necessary, additional testing will be performed based on an individual basis. This may include additional heart tests such as an echocardiogram. The transplant team seeks to confirm that you are in good health for the surgery and that you do not have any associated kidney disease or medical conditions that may be associated with kidney disease in the future. If there are significant concerns over medical issues, the Emory Transplant Team will advise you not to donate. Once the evaluation is complete, it takes approximately 2 weeks to receive your results.

2. When a donor lives out of state and does not wish to come to Emory for the evaluation, we may be able to arrange for a remote evaluation. The recipient’s insurance company must allow for this method of evaluation, which will be performed by a Transplant Center convenient to the donor’s home. This is typically an outpatient evaluation. The Emory Transplant Center will send a request to the chosen remote center for the necessary medical tests. The remote center will perform the tests and send Emory the results. We will evaluate the results and make a candidacy decision. This process usually takes approximately 2-3 months to complete.

Since the fall of 1999 virtually all donor nephrectomies performed at the Emory Transplant Center have been done using the laparoscopic technique. This includes patients with extra blood vessels to the kidney and instances in which the right kidney was removed for transplantation. The laparoscopic technique offers the donor a more rapid and less uncomfortable recovery while providing the recipient a kidney that functions the same as a kidney removed through the much larger incision used for the open technique. To date Emory surgeons have performed over 250 consecutive laparoscopic donor nephrectomies.

The transplant pre-operative workup is completed at Emory one to two weeks before the surgery. The workup may involve blood tests, EKG, chest x-ray, history and physical examination, and consultation with the anesthesiologist. The donor is admitted to Emory Hospital on the morning of surgery.
The Laparoscopic Donor Nephrectomy
Laparoscopic donor nephrectomy is a minimally invasive surgical procedure which allows the removal of a kidney for transplantation through 4 small incisions. The main incision is made below the belly button and is 3 inches long. This incision is used to remove the kidney. The other 3 incisions are used to insert the instruments used to free the kidney from its attachments before it is removed. These incisions vary in size from ¼ to ½ inch long and are placed on the side of the abdomen. During the procedure, the abdomen is inflated with a gas, which allows a space to be developed between the wall of the abdomen and the kidney. This allows the surgeon easier access to the kidney. After the kidney is removed all of the incisions are closed with stitches which dissolve over several months. These stitches are placed on the inside and the skin edges are sealed with medical glue. This “plastic suturing” technique causes less scarring. With the avoidance of a large incision, the likelihood of a rapid recovery from the procedure is increased.

The operation takes approximately 3 to 4 hours and as with all surgery, involves risks. Any operation can be complicated by anesthetic complications, bleeding, blood clots or infection. Occasionally, a difficulty may occur which cannot be safely managed laparoscopically. In this situation, conversion to a conventional open procedure will be performed.

Once the donated kidney is removed, it is immediately prepared for transplant into the recipient, who will already be anesthetized in an adjacent operating room. The donor will be observed and cared for in the Post Anesthesia Care Unit for approximately 2 hours before returning to a regular hospital room, family and friends. The surgeon will speak with waiting relatives to report on your progress as soon as the surgery is complete. Please expect to remain in the hospital for approximately 2-3 days after surgery and in the Atlanta area for one week after the procedure. During the week after surgery, you will be examined by the surgeon before returning home.

Recovery and return to work takes approximately 2 weeks for a desk job and 4-6 weeks for those with a more physically demanding job. It is recommended that donors avoid any heavy lifting for a minimum of 6 weeks following surgery. It is also suggested donors avoid participating in contact sports such as football or hockey, which might injure the one remaining kidney.

The Open Donor Nephrectomy
Open donor nephrectomy is an operation performed with standard operating techniques. This procedure requires an 8 to 12 inch incision in the side/back with the possible removal of a rib to allow for access to the kidney. This technique has been used for several decades and has an excellent record of safety for the donor and for producing an excellent quality of kidney for the recipient. Because the post-operative recovery is usually more difficult with this technique as compared to the newer laparoscopic approach, Emory surgeons now use this technique only for those rare patients in whom laparoscopic donor nephrectomy may not be safe.

Finances
The costs of the evaluation and surgery for the donor are usually borne by the recipient’s insurance and Medicare. However, because each individual recipient’s insurance policy may vary, Emory will verify full donor benefits and billing requirements related to the donor evaluation and surgery. Emory will also review the donor’s insurance policy or policies and will inform the potential donor of any costs they may incur. Each donor will have the opportunity to discuss the financial considerations of living kidney donation with a Financial Coordinator from the Emory Transplant Center. If the donor or recipient is a resident of Georgia, the Georgia Transplant Foundation (GTF) may be of assistance with some donor expenses.

Also, January 1, 2005, Georgia’s Living Donor Tax Credit became effective. This tax credit allows living donors who are Georgia taxpayers to receive a tax deduction up to $10,000 on costs incurred from organ donation, such as travel expenses, lodging expenses, and lost wages. For more information about living donor financial assistance or the tax credit contact: GTF at 770-457-3796 or toll-free at 866-428-9411.
The Emory Transplant Team encourages living donor transplants for the following reasons:

- A kidney for transplantation may come from either a living person such as a friend, spouse or family member or from a deceased donor, which is someone who has recently died. While most kidneys from deceased donors function well, a kidney from a living donor, either a blood relative or an unrelated person, provides the greatest chance for long-term success.
- Early transplantation improves the survival of the transplanted kidney. Because patients who receive a kidney from a living donor do not need to wait on the list for a kidney from a deceased organ donor, they can undergo transplantation earlier.
- The likelihood of immediate function of the kidney after a living donor transplant is excellent.

Who can donate?

- Family members, spouses or friends.
- Minimum age for a living donor is 18 years old.
- Medical conditions such as high blood pressure, diabetes, and obesity may affect a person’s ability to donate.

The Emory Transplant Team will evaluate each potential donor very carefully. The following information is provided to help you understand Emory’s living donor process. This process is divided into four phases. If you have any questions, please do not hesitate to contact your Emory transplant coordinator at 404-712-4837 or toll free 1-866-727-3250. Additional information regarding transplantation can be found on the Emory Transplant Center website, www.transplant.emory.edu or on the United Network for Organ Sharing website, at www.unos.org.

INFORMATION FOR POTENTIAL LIVING DONORS

Thank you for your interest in kidney donation. The generous gift of a kidney can be an incredible and rewarding experience for everyone involved. Kidney transplantation can improve the length and quality of the recipient’s life and strengthen the feeling of closeness between the recipient and the donor.

Donation is an important decision, which involves potential benefits and risks. We hope that this brochure will provide information to help you make the best decision about what is right for you. The Emory Transplant Team is dedicated to providing excellent comprehensive care for all patients involved in the transplant process.

ALL INFORMATION IS CONFIDENTIAL BETWEEN THE DONOR AND THE TRANSPLANT TEAM

Giving a kidney is a personal decision. We do not give any information regarding the donor to anyone except the donor, including the potential recipient.